



1-component silicone sealant based on aminoxime MEKO-free

For indoor and outdoor application

S 51

Characteristics

- ▶ Flame retardant - building material class B1 according to DIN 4102 and DIN EN ISO 4589 - Can be used under increased fire protection requirements
- ▶ Wide range of colours - Colour adapted to common floor coverings (e.g. PVC, rubber and linoleum)
- ▶ Excellent weathering, ageing and UV-resistance

Fields of application

- ▶ Sealing of floor and connection joints for plastic and design floor coverings made of rubber, linoleum, vinyl and PVC
- ▶ Sealing of similar and dissimilar working materials such as glass, stainless steel, aluminium and some plastics

Standards and tests

- ▶ Tested according to EN 15651 – Part 1: F EXT-INT CC 25 LM
- ▶ Tested according to EN 15651 – Part 4: PW EXT-INT CC 25 LM
- ▶ Tested according to DIN 4102-B1 – hardly inflammable between solid mineral building materials (wood research at the Munich Technical University)
- ▶ Tested according to DIN EN ISO 4589-2:1999 Plastics - Definition of the fire-behaviour due to the oxygen index (Bodycote Warringtonfire)
- ▶ Tested for applications in the cleanroom sector by the Institute for Hygiene Gelsenkirchen, Germany
- ▶ French VOC-emission class A+
- ▶ Suitable for applications according to IVD instruction sheet no. 1+11+31+35 (IVD = German industry association sealants)

Technical properties

Skin-forming time at 23 °C/50 % RH [minutes]	~ 6
Curing in 24 hours at 23 °C/50 % RH [mm]	~ 2 - 3
Processing temperature from/to [°C]	+ 5 / + 35
Viscosity at 23 °C	pasty, stable
Density at 23 °C according to ISO 1183-1 [g/cm³]	~ 1,3
Shore-A-hardness according to ISO 868	~ 27
Permissible movement capability [%]	25
Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm²]	~ 0,5
Tensile expansion according to ISO 37, type 3 [%]	~ 550
Tensile strength according to ISO 37, type 3 [N/mm²]	~ 1,2



Temperature resistance from/to [°C]	- 40 / + 150
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	18

These data are not suitable for the issue of specifications. Please contact OTTO-CHEMIE before issuing specifications.

Pretreatment

The adherent surfaces have to be clean, free from fat, dry and sustainable. The adhesive surfaces must be cleaned and any contamination such as release agents, preservatives, grease, oil, dust, water, old adhesives/sealants and other substances impairing adhesion must be removed. Cleaning of non-porous substrates: Clean with OTTO Cleaner T (no flash-off time required) and a clean, lint-free cloth. Cleaning porous substrates: Clean surfaces mechanically, e.g. with a steel brush or a grinding disc, to remove loose particles.

Primer table

The demands on elastic sealings and bondings depend on the respective exterior influences. Extreme fluctuations in temperature, tensile or shear forces, repeated contact with water etc. demand high requirements of a bonding. In such cases it is advisable to apply primer according to the recommendations of our technical department (e. g. +/OTTO Primer 1216) in order to achieve a resilient bonding.

Aluminium	+
Aluminium anodized	+
Aluminium powder-coated	1101 / T
Concrete	1105 / 1215
Floor covering, rubber	+
Floor covering, PVC	+
Floor covering, vinyl	+
Epoxid resin coating	+
Epoxid resin mortar	+ / 1216
Stainless steel	1216
Glass	+
Ceramic, glazed	+
Ceramics, unglazed	+
Linoleum	+
Natural stone / marble	-
Plaster	1105 / 1215
PVC soft	+

+ = good adherence without primer

- = not suitable

T = Test/pilot test advised

Important information

Before applying this product the user has to ensure that the materials in the area of contact (solid, liquid and gaseous) are compatible with it and also amongst each other and do not damage or alter (e. g. discolour) each other. As for the materials that will be used at a later stage in the surrounding area of the product the user has to clarify beforehand that the substances of content or evaporations do not lead to an impairment or alteration (e. g. discolouration) of the product. In case of doubt the user should consult the respective manufacturer of the material.

During curing small amounts of an amine-/oxime-compound are released.

Ensure good ventilation during application and curing.

The required vulcanization time prolongs with increasing thickness of the silicone layer. One-component silicones are not suitable for full-area bonding, unless there are specific structural conditions that require such full-area application. If one-component silicones are to be used for thickness layers of more than 15 mm please contact our technical department beforehand.

For sealing of linoleum floorings please wet smoothing tool with only a little smoothing agent or rebate dryly. Remove excess smoothing agent on the flooring before drying in order to avoid staining.

Avoid contact with materials which contain bitumen and which release solvents, e. g. butyl, EPDM, neoprene, insulating- and bituminous paint.

Indoors without daylight or in the case of sporadic artificial lighting, alkoxy/oxime/amine silicone sealants may exhibit a yellowing over time, especially in transparent and light colours. If technically possible, it is recommended to use acetate silicones in these cases.

Application information

Amin cross-linking silicone sealants may cause yellowing of certain alkyd paints and various plastics or similar - therefore we recommend carrying out trials before use.













Due to the many possible influences during and after application, the customer always has to carry out trials first.

Please observe the recommended shelf life which is printed on the packaging.








We recommend to store our products in unopened original packagings dry (< 60 % RH) at temperatures of +15 °C up to +25 °C. If the products are stored and / or transported at higher temperatures / air humidity for longer periods (some weeks), a diminution of durability or a change of material characteristics may arise.

Packaging

Glossy colors

	310 ml cartridge
 agate grey	S51-04-C62
 anthracite	S51-04-C67
 aqua	S51-04-C1042
 bahamabeige	S51-04-C10
 pale brown	S51-04-C1062
 blue grey	S51-04-C1671
 brown	S51-04-C05
 brown red	S51-04-C1063
 brilliant blue	S51-04-C958
 crema	S51-04-C1657
 cream beige	S51-04-C1043
 cream white	S51-04-C7148
 thistle grey	S51-04-C81
 doussie, pear tree	S51-04-C85
 dark brown	S51-04-C49
 fair oak	S51-04-C64
 rustic oak	S51-04-C98
 flash grey	S51-04-C787
 pine	S51-04-C5128
 cherry	S51-04-C17
 clay	S51-04-C1053
 lime green	S51-04-C7699
 melon	S51-04-C1044
 orangina	S51-04-C1129
 oxide red	S51-04-C1131
 pastel blue	S51-04-C982
 pastel yellow	S51-04-C1056
 pastel green	S51-04-C1008
 patina green	S51-04-C1112
 pearl grey	S51-04-C1662
 pure white	S51-04-C1646
 saffron yellow	S51-04-C1049
 sahara	S51-04-C103
 sandstone grey	S51-04-C979
 black	S51-04-C04
 signal white	S51-04-C1651
 stone grey	S51-04-C79
 dove blue	S51-04-C964
 taupe	S51-04-C1667

Glossy colors

 deep sea blue	S51-04-C983
 titan grey	S51-04-C1172
 tomato	S51-04-C1066
 transparent	S51-04-C00
 violet	S51-04-C1116
 white	S51-04-C01
 cloud grey	S51-04-C1670
Pieces per packaging unit	20
Pieces per pallet	1200

Due to typographical reasons the colours shown below may differ from the original colours of the products. For an exact colour display please request our original colour charts.

Safety precautions

Please observe the material safety data sheet.
After curing, the product is odourless.

Disposal

Information about disposal: Please refer to the material safety data sheet.

Warranty information

The above information and our technical application advice, whether verbal, in writing or by means of tests, are provided to the best of our knowledge, but are non-binding, including with regard to any third-party property rights. The information in this publication does not exempt the processor from carrying out their own tests on our products with regard to their suitability for the intended processes and purposes. The application, use and processing of our products and the products manufactured on the basis of our technical application advice are beyond our control and are therefore the sole responsibility of the processor. If the application for which our products are used is subject to an official authorisation requirement, the user is responsible for obtaining these authorisations. We reserve the right to adapt the product to technical progress and new developments. For the rest, we refer to our General Terms and Conditions, in particular with regard to any liability for defects. You can find our GTC at www.otto-chemie.de.